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EXAMINER	
GRIER, LAURA A	

ART UNIT	PAPER NUMBER
2644	

DATE MAILED: 03/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/045,524	CRUTCHFIELD, RANDOLPH E.	
	Examiner	Art Unit	
	Laura A Grier	2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *25 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *07 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 3.
4) ☒ Interview Summary (PTO-413) Paper No(s)/Mail Date. 6.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Embodiment II and complimentary claims 1-30 in Paper No. 5 is acknowledged (see attached Interview Summary).

Information Disclosure Statement

2. The references listed in the Information Disclosure Statement dated 03/04/03 have been considered by the Examiner and is attached to this Office Action.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. ***Claims 1-26*** are rejected under 35 U.S.C. 102(b) as being anticipated by Akahane, U. S. Patent No. 5654942.

Regarding ***claims 1 and 10***, Akahane disclose a wireless voice messaging device for use with a cassette player. Akahane's disclosure comprises a pager (10) with the dimensions of a typical audio cassette (col. 4, lines 15-17), which reads providing a cassette tape shaped adapter to be received within a cassette tape player; with the pager having digital components (figure 4 – reference 10), the pager itself reads on a digital audio player; the controls of the player/recorder

enables the operations of the pager (col. 4, lines 60-64), which reads on enabling the digital audio player to be controlled through controls for said cassette tape player.

Regarding ***claims 2-3***, Akahane discloses everything claimed as applied above (see claim 1). Akahane further discloses the control buttons, play, fast forward, rewind and record of the player/recorder enabling the operations of the pager (col. 4, lines 60-64 and 65-67 and col. 5, lines 1-19), which reads on operating the digital player to play in response to the operation of the play control and stopping the playback of the digital audio player in response to the operation of control on the cassette tape player.

Regarding ***claims 4-6***, Akahane discloses everything claimed as applied above (see claim 1). Akahane further discloses a main processing unit (MPU) which senses the operation of the player/recorder and uses the information to control the digital audio player (col. 6, lines 7-40), including sensing the rotation of tape player (col. 7, lines 14-59), which reads sensing the direction, rotation and operation of the head of the tape player.

Regarding ***claim 7***, Akahane discloses everything claimed as applied above (see claim 1). Akahane further discloses a main processing unit (MPU), which senses the operation of the player/recorder and uses the information to control the digital audio player (col. 6, lines 7-40).

Regarding ***claims 8-9***, Akahane discloses everything claimed as applied above (see claim 1). Akahane further discloses a main processing unit (MPU) which senses the operation of the player/recorder and uses the information to control the digital audio player), including sensing rewind and recording, therein, of the tape player (col. 6, lines 7-40), which reads detecting rewind control and record control, therein.

Regarding claims ***11, 12, 17 and 18***, Akahane discloses everything claimed as applied above (see claim 10). Akahane inherently discloses storing instructions to enable a processor-based system to operate the digital audio player in response to operation of play control on the cassette tape player as evident by the coupling a main processing unit (MPU), which controls the pager, and a memory; wherein, the MPU senses the operation of the player/recorder and uses the information to control the digital audio player (col. 6, lines 7-40), like play, fast forward, rewind and record of the player/recorder enabling the operations of the pager (col. 4, lines 60-64 and 65-67 and col. 5, lines 1-19), which reads on storing instructions to a processor-based system to play, stop, detect rewind and detect record, therein.

Regarding ***claims 13-15***, Akahane discloses everything claimed as applied above (see claim 10). Akahane inherently discloses storing instructions to enable a processor-based system to operate the digital audio player in response to operation of control on the cassette tape player as evident by the coupling a main processing unit (MPU), which controls the pager, and a memory; wherein, the MPU senses the operation of the player/recorder and uses the information to control the digital audio player (col. 6, lines 7-40), including sensing the rotation of tape player (col. 7, lines 14-59), which reads storing instructions for sensing the direction, rotation and operation of the head of the tape player.

Regarding ***claim 16***, Akahane discloses everything claimed as applied above (see claim 10). Akahane inherently discloses storing instructions to enable a processor-based system to operate the digital audio player in response to operation control on the cassette tape player as evident by the coupling a main processing unit (MPU), which controls the pager, and a memory;

wherein, the MPU senses the operation of the player/recorder and uses the information to control the digital audio player (col. 6, lines 7-40).

Regarding ***claim 19***, Akahane disclose a wireless voice messaging device for use with a cassette player. Akahane's disclosure comprises a pager (10) with the dimensions of a typical audio cassette (col. 4, lines 15-17), which reads providing a cassette tape shaped adapter to be received within a cassette tape player; with the pager having digital components (figure 4 – reference 10), the pager itself reads on a digital audio player; the MPU of the pager inherently acts as an interface as evidence by the MPU controls and relates all functions within the pager (col. 6, lines 7-40).

Regarding ***claims 20-21***, Akahane discloses everything claimed as applied above (see claim 19). Akahane further discloses a main processing unit (MPU) which senses the operation of the player/recorder and uses the information to control the digital audio player (col. 6, lines 7-40), including sensing the rotation of tape player (col. 7, lines 14-59), which reads sensing the direction, rotation and operation of the head of the tape player.

Regarding ***claims 22-26***, Akahane discloses everything claimed as applied above (see claim 19). Akahane inherently discloses storing instructions to enable a processor-based system to operate the digital audio player in response to operation of control on the cassette tape player as evident by the coupling a main processing unit (MPU), which controls the pager, and a memory; wherein the MPU senses the operation of the player/recorder and uses the information to control the digital audio player (col. 6, lines 7-40), like play, fast forward, rewind and record of the player/recorder enabling the operations of the pager (col. 4, lines 60-64 and 65-67 and col.

5, lines 1-19), which reads on a controller storing instructions to play, stop, detect rewind and detect record, therein.

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. ***Claims 1-26*** are rejected under 35 U.S.C. 102(e) as being anticipated by Zhang, Pub. No.: US 2002/00884334.

Regarding ***claim 1***, Zhang discloses a digital electronic audio player with cassette tape simulation feature and compatible with cassette tape players, and method therefore. Zhang's disclosure comprises a digital electronic audio player (20) coupled with an extension adaptor (30) to be used in a car cassette recorder (40), (paragraph 0027) with shape similar to a cassette tape, which reads on a cassette tape shaped adapter to be received within a cassette tape player; the digital electronic audio player (DEAP) functions as the digital player and as the cassette tape adapter (page 4, claim 1), which reads on enabling a digital audio player to be coupled to the adapter; the DEAP functions in response to which control button (paragraphs 0034 –0042 and figure 4 – references 409-413 and paragraph 0054) of the cassette tape player is pushed based upon the sensing of the motion detection circuit (216) of the DEAP from the cassette tape player to provide and indicate to the DEAP which mode (play, reverse, forward, etc.) the DEAP will operate under, which reads on enabling the audio player to be controlled by through controls for said cassette tape player.

Regarding ***claim 2***, Zhang discloses everything claimed as applied above (see claim 1). Zhang further discloses the DEAP the motion detection circuit detecting various (play - (409 or 410), reverse, forward, etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player (paragraphs 0034-0042), which reads on operating the digital audio player to play in response to operation of a play control on the cassette tape player.

Regarding ***claim 3***, Zhang discloses everything claimed as applied above (see claim 1). Zhang further discloses the DEAP the motion detection circuit detecting various (play, reverse, forward, stop (413), etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player (paragraphs 0034-0042), which reads on stopping the playback of audio on the digital audio player in response to operation of a control on the cassette tape player.

Regarding ***claims 4 and 5, respectively***, Zhang discloses everything claimed as applied above (see claim 1). Zhang further discloses motion detection circuit comprising wheels (211 and 212), and motion sensor (218), which are used to the detect the direction as to whether the axles of the tape player are moving a reverse direction (rewind), forward direction, etc. in respect to the speed of the axles (paragraph 0034-0042), which reads on sensing the rotation and/or sensing the direction of rotation of the tape player.

Regarding ***claim 6***, Zhang discloses everything claimed as applied above (see claim 1). Zhang further discloses the motion detection circuit detecting via the magnetic heads 210 and 401, and the motion of the spin mechanism (404/402/403) of the cassette tape player (40), which reads on the sensor sensing operation of the head of the tape player (figure 4).

Regarding ***claim 7***, Zhang discloses everything claimed as applied above (see claim 1). Zhang further discloses the DEAP the motion detection circuit detecting various (play - (409 or

410), reverse, forward, etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player (paragraphs 0034-0042) for controlling the DEAP, which reads using the cassette tape adapter to sense an operation of the cassette tape player and to use that information to control the digital audio player.

Regarding ***claim 8***, Zhang discloses everything claimed as applied above (see claim 1). Zhang further discloses the DEAP the motion detection circuit detecting various (play, reverse (411 or 412), forward, etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player (paragraphs 0034-0042), which reads on detecting when a rewind control on the cassette tape player is operated and in response to the detection of the rewind control being operated, replaying a selection on the digital audio player.

Regarding ***claim 9***, Zhang discloses everything claimed as applied above (see claim 1). Zhang further discloses the DEAP the motion detection circuit detecting various (play, reverse (411 or 412), forward, etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player (paragraphs 0034-0042) and Zhang further indicates that a record mode control means can be added to the DEAP to function accordingly as the others (paragraph 0056), which reads on detecting operation of a record control on the cassette tape player and automatically implementing a record function on the digital audio player.

Regarding ***claim 10***, Zhang discloses a digital electronic audio player with cassette tape simulation feature and compatible with cassette tape players, and method therefore. Zhang's disclosure comprises a digital electronic audio player (20) coupled with an extension adaptor (30) to be used in a car cassette recorder (40), (paragraph 0027) with shape similar to a cassette tape, which reads on a cassette tape shaped adapter to be received within a cassette tape player;

the digital electronic audio player (DEAP) functions as the digital player and as the cassette tape adapter (page 4, claim 1), which reads on enabling a digital audio player to be coupled to the adapter; the DEAP functions in response to which control button (paragraphs 0034 –0042 and figure 4 – references 409-413, and paragraph 0054) of the cassette tape player is pushed based upon the sensing of the motion detection circuit (216) of the DEAP from the cassette tape player to provide and indicate to the DEAP which mode (play, reverse, forward, etc.) the DEAP will operate under, which reads on enabling the audio player to be controlled by through controls for said cassette tape player.

Regarding ***claim 11***, Zhang discloses everything claimed as applied above (see claim 10). Zhang further discloses the DEAP comprising a processor (209) coupled to the motion detection circuit, which detect various (play - (409 or 410), reverse, forward, etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player, and the processor is coupled to the memory (206) which stores the operating system and audio files, wherein the controller controls all the operations of the DEAP (paragraph 0031), which inherently reads on storing instructions to the enable a processor-based system to operate the digital audio player in response to operation of a play control on a cassette tape player as evidence by the processor being coupled to the memory which stores the operating system (instructions) which enables processor-based system to function.

Regarding ***claim 12***, Zhang discloses everything claimed as applied above (see claim 10). Zhang further discloses the DEAP comprising a processor (209) coupled to the motion detection circuit, which detect various (play, reverse, forward, stop (413), etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player, and the processor is coupled to

the memory (206) which stores the operating system and audio files, wherein the controller controls all the operations of the DEAP (paragraph 0031), which inherently reads on storing instructions to the enable a processor-based system to stop the playback of audio on the digital audio player in response to operation of a stop control on a cassette tape player as evidence by the processor being coupled to the memory which stores the operating system (instructions) which enables processor-based system to function.

Regarding ***claims 13 and 14, respectively***, Zhang discloses everything claimed as applied above (see claim 10). Zhang further discloses the DEAP comprising a processor (209) coupled to the motion detection circuit which detect various (play, reverse, forward, stop (413), etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player via wheels and motion sensor for rotation detection of the spin axles (in respect to speed) of the cassette tape player for indicating the function of cassette, wherein the processor is coupled to the memory (206) which stores the operating system and the processor controls all the operations of the DEAP (paragraph 0031), which inherently reads on storing instructions to the enable a processor-based system to sense the direction of rotation or just rotation of the tape player as evidence by the fact the processor being coupled to the memory which stores the operating system (instructions) which enables processor-based system to function.

Regarding ***claim 15***, Zhang discloses everything claimed as applied above (see claim 10). Zhang further discloses the DEAP comprising a processor (209) coupled to the motion detection circuit which detect various (play, reverse, forward, stop (413), etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape; and Zhang further indicates that a record mode control means can be added to the DEAP to function accordingly as the others (paragraph

0056), wherein the processor is coupled to the memory (206) which stores the operating system and the processor controls all the operations of the DEAP (paragraph 0031), which inherently reads on storing instructions to the enable a processor-based system to sense operation of the record head of the tape player as evidence by the fact the processor being coupled to the memory which stores the operating system (instructions) which enables processor-based system to function.

Regarding ***claim 16***, Zhang discloses everything claimed as applied above (see claim 10). Zhang further discloses the DEAP the motion detection circuit detecting various (play - (409 or 410), reverse, forward, etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player (paragraphs 0034-0042) for controlling the DEAP, wherein the motion detection circuit is coupled to a processor, and processor is coupled to the memory (206) which stores the operating system and the processor controls all the operations of the DEAP (paragraph 0031), which inherently reads on storing instructions to the enable a processor-based system to use the cassette taped shaped adapter to sense an operation of the cassette player and to use that information to control the digital audio player as evidence by the fact the processor being coupled to the memory which stores the operating system (instructions) which enables processor-based system to function.

Regarding ***claim 17***, Zhang discloses everything claimed as applied above (see claim 10). Zhang further discloses the DEAP comprising a processor (209) coupled to the motion detection circuit, which detect various (play, reverse (411 or 412), forward, stop, etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player, and the processor is coupled to the memory (206) which stores the operating system and audio files, wherein the

controller controls all the operations of the DEAP (paragraph 0031), which inherently reads on storing instructions to the enable a processor-based system to detect when a rewind control on the cassette tape player is operated and in response to detection of rewind control operation, replay a selection on the digital player as evidence by the processor being coupled to the memory which stores the operating system (instructions) which enables processor-based system to function.

Regarding ***claim 18***, Zhang discloses everything claimed as applied above (see claim 10). Zhang further discloses the DEAP comprising a processor (209) coupled to the motion detection circuit which detect various (play, reverse, forward, stop (413), etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape; and Zhang further indicates that a record mode control means can be added to the DEAP to function accordingly as the others (paragraph 0056), wherein the processor is coupled to the memory (206) which stores the operating system and the processor controls all the operations of the DEAP (paragraph 0031), which inherently reads on storing instructions to the enable a processor-based system to detect operation of a record control on the cassette the tape player and automatically implement a record function on the digital audio player as evidence by the fact the processor being coupled to the memory which stores the operating system (instructions) which enables processor-based system to function.

Regarding **claim 19**, Zhang discloses a digital electronic audio player with cassette tape simulation feature and compatible with cassette tape players, and method therefore. Zhang's disclosure comprises a digital electronic audio player (20) to be used in a car cassette recorder (40), (paragraph 0027) with shape similar to a cassette tape, which reads on a cassette-shaped

housing; motion detection circuit (216) for detecting the motion in respect to which mode the cassette tape is operating in, which reads on a sensor to sense an operation of a cassette tape player (paragraphs 0034 –0042 and figure 4 – references 409-413); digital audio player provides communication within to the DEAP to activate functions, therein, like the motion detection circuit (216) coupled with magnetic heads to the cassette tape player, which inherently support an interface coupled to a digital audio player (paragraph 0038).

Regarding ***claim 20***, Zhang discloses everything claimed as applied above (see claim 19). Zhang further discloses motion detection circuit comprising wheels (211 and 212), and motion sensor (218), which reads on a rotatable element and a sensor to sense rotation of the element.

Regarding **claim 21**, Zhang discloses everything claimed as applied above (see claim 19). Zhang further discloses the motion detection circuit detecting via the magnetic heads 210 and 401, the motion of the spin mechanism (404/402/403) of the cassette tape player (40), which reads on the sensor sensing operation of a cassette tape head (figure 4).

Regarding ***claim 22***, Zhang discloses everything claimed as applied above (see claim 19). Zhang further discloses the DEAP comprising a processor (209) coupled to the motion detection circuit, which detect various (play - (409 or 410), reverse, forward, etc. figure 4 –references 409-413 and paragraph 0034) functions from the cassette tape player, and the processor is coupled to the memory which stores the operating system and audio files, wherein the controller controls all the operations of the DEAP (paragraph 0031), which inherently reads on the controller storing instruction to the enable detection of the operation of a play button on a cassette tape player as evidence by the global control of the processor.

Regarding ***claim 23***, Zhang discloses everything claimed as applied above (see claim 22). Zhang further discloses the DEAP comprising a processor (209) coupled to the motion detection circuit, which detect various (play, reverse, forward, stop (413), etc. figure 4 –references 409-413, and paragraph 0034) functions from the cassette tape player, wherein the controller controls all the operations of the DEAP (paragraph 0031), which inherently reads on the controller storing instruction to the enable detection of the operation of a stop button on a cassette tape player as evidence by the global control of the processor.

Regarding ***claim 24***, Zhang discloses everything claimed as applied above (see claim 23). Zhang further inherently indicates the motion detection circuit acting as an interface by providing a trigger communication signal within the DEAP that the stop function has been actuated by cassette tape player the simulate the same function for the DEAP (paragraph 0038).

Regarding ***claim 25***, Zhang discloses everything claimed as applied above (see claim 23). Zhang further discloses the DEAP comprising a processor (209) coupled to the motion detection circuit, which detect various (play, reverse (411 or 4120, forward, stop, etc. figure 4 –references 409-413, and paragraph 0034) functions from the cassette tape player, wherein the controller controls all the operations of the DEAP (paragraph 0031), which inherently reads on the controller storing instruction to the enable detection of the operation of a tape rewind button on a cassette tape player as evidence by the global control of the processor.

Regarding ***claim 26***, Zhang discloses everything claimed as applied above (see claim 25). Zhang further inherently indicates the motion detection circuit acting as an interface by providing a trigger communication signal within the DEAP that the reverse or rewind function

has been actuated by cassette tape player to simulate the same function for the DEAP (paragraph 0038).

6. ***Claims 28-30*** are rejected under 35 U.S.C. 102(e) as being anticipated by Adams, U. S. Patent No. 6594366.

Regarding **claim 28**, Adams discloses a headset/radio auto sensing jack (figures 1-3). Adams' disclosure comprises an electronic device (50) with a sensing circuit (figure 3 - 201/210) for sensing low or high impedance from a headphone (col. 4, lines16-45), and figure 3), which reads on a detector to detect a selectively variable impedance in a remote device, and the connection of the plugs (106/108) of the headphones to the electronic device, which includes communication controller and an AM/FM radio unit (col. 3, lines 5-8, and 30-33), reads on an electrical coupling to an audio signal from the digital audio player to the detector.

Regarding ***claim 29***, Adams discloses everything claimed as applied above (see claim 28). Adams further discloses audio output via the headphones (figure 1 - 101/103) and/or the speaker (126) on the electronic device, where the sensor is connectable to the headphones when plug into the electronic device for audio output.

Regarding ***claim 30***, Adams discloses everything claimed as applied above (see claim 28). Adams further discloses audio output via the headphones (figure 1 - 101/103) when plug into the electronic device for audio output (figure 3), which reads the audio output as a headphone output (col. 2, lines 30-39).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. ***Claim 27*** is rejected under 35 U.S.C. 103(a) as being unpatentable over Zhang in view of Divon et al., U. S. Patent No. 6301513.

Regarding ***claim 27***, Zhang discloses everything claimed as applied above (see claim 19). However, Zhang fails to specifically disclose selective variable impedance couple to a digital audio player.

Regarding the variable impedance, in a similar field of endeavor, Divon et al. (herein, Divon) discloses a vocal information system. Divon's disclosure comprises a impedance matching between two digital device (figures 14A and 14B and col. 15, lines 45-50).

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention to Zhang by coupling variable impedance to the digital audio player for purpose of enable efficient and parallel resistance/impedance for balancing the coupling between the digital player and cassette tape player for adequate audio processing.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A Grier whose telephone number is (703) 306-4819. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Forester W. Isen can be reached on (703) 305-4386.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Or faxed to:

(703) 872-9314 (for Technology Center 2600 only)

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

LAG Laura A Gutierrez
March 21, 2004